

COSMIC QUIZ

An original audio script by
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COSMIC QUIZ

CAST

ALAN ALPHER	Game show host
CYNTHIA	Game show announcer
BETTY BETHE	Contestant #1
GAIL GAMOW	Contestant #2

We have cast:

ANDY as ALAN ALPHER
MARISA as CYNTHIA
REBEKA as BETTY BETHE
CAROL as GAIL GAMOW

SYNOPSIS

Somewhat standard quiz-show featuring five questions about the Universe.

SCENE ONE: STUDIO - DAY

(ANNOUNCER, ALAN, BETTY, GAIL)

MUSIC: Opening game show music.

CYNTHIA: Welcome to Cosmic Quiz, the show that asks the questions of the Universe! Please welcome our host, Alan Alpher.

SOUND: Canned applause.

ALAN: Thank you, Cynthia. Today we have two fierce competitors, Betty Bethe and Gail Gamow. Betty, please tell us a little about yourself.

BETTY: Alan, I'm so thrilled to be here. In my free time I'm a stamp collector. I find that stamps are the only way countries can co-exist side-by-side in peace.

ALAN: (FAKE APPRECIATION) That sounds nice.
(PAUSE) Betty, you will be playing against Gail today. Gail, tell us about yourself.

GAIL: Thank you so much for having me on the show, Alan. My friends know me as a bit of a prankster, and April Fools Day is my favorite holiday.

ALAN: (FAKE APPRECIATION) That's great. (PAUSE)
Now that we have the pleasantries out of the way, let's get right into the game! Today's questions are all about the origin of the cosmos. Good luck to both of you. Hands on your buzzers?

BETTY: (OVER EACH OTHER) Yup.

GAIL: (OVER EACH OTHER) Yes.

ALAN: Then we'll move straight into our first question. What stagnant yet dynamic theory of the universe did Fred Hoyle propose along with colleagues in the late '40s?

SOUND: Buzzer.

ALAN: Yes, Gail?

GAIL: Was it the theory of stale bread?

ALAN: No, I'm sorry it was not.

SOUND: Canned "ohs".

ALAN: Betty? Do you want to try?

BETTY: Yes, Alan. I believe it was the steady state theory.

ALAN: That's correct! Betty now has one correct answer.

SOUND: Canned applause.

ALAN: Let's move on to the second question. What explosive theory of the origin of the Universe did George Gamow and his colleagues develop?

SOUND: Buzzer.

ALAN: Yes, Gail?

GAIL: That's the Big Bang Theory.

ALAN: Correct!

SOUND: Canned applause.

GAIL: I better know, since I share my last name with Gamow. (FORCED LAUGHTER) Ha ha ha.

ALAN: Originally known as the evolutionary theory of the universe, big bang theory is the leading explanation of the origin of the Universe. Our score is one-one. Next question. Contestants, have your buzzers ready. After investigating the noise properties of pigeon droppings, what pair of researchers discovered microwave radiation permeating the Universe in the '60s?

SOUND: Buzzer.

ALAN: Betty, you've got it!

BETTY: Oh... (PAUSE)...shoot! I had it...

ALAN: Quickly, your time is running out...

SOUND: Timer.

SOUND: Canned "ohs".

ALAN: Sorry Betty. Gail? Do you know?

GAIL: Yes! Penzias and Wilson!

ALAN: That is correct!

SOUND: Canned applause.

ALAN: The score is now two-one in Gail's favor.
If you get this one, Gail, you'll win
today's game. Here's your next question.
What do astronomers call this microwave
background radiation permeating the cosmos?

SOUND: Buzzer.

ALAN: Betty, its yours again.

BETTY: It's the cosmic microwave background!

ALAN: That is correct!

SOUND: Canned applause.

ALAN: You are making this one heck of a nail-
biter, Betty. The score is now two all.
It's anyone's game. Whoever gets this next
question correct will be our winner.

Cynthia, will you tell our contestants what they will win?

CYNTHIA: My pleasure Alan. The winner of today's Cosmic Quiz will win some hydrogen and helium, direct from the Big Bang! Good luck to you both!

SOUND: Canned applause.

ALAN: Thank you Cynthia. Here is our final question, contestants. What current NASA satellite, launched in 2001, is mapping the cosmic microwave background to greater and greater detail?

SOUND: Buzzer.

ALAN: Gail, this game is all yours if you have the correct answer.

GAIL: It's the...(PAUSE)...the (PAUSE) the Watson Mapping Attitude Probe, or WMAP.

ALAN: Oh, I'm sorry Gail, but that is incorrect.

SOUND: Canned "ohs".

ALAN: If Betty has the right answer, she will win today's game. If not, we'll go into a sudden-death tie-breaker question. Betty?

BETTY: I know this, Alan. Gail had the acronym right, but the words wrong. It's the Wilkinson Microwave Anisotropy Probe!

ALAN: That's correct!

SOUND: Canned applause.

ALAN: WMAP has mapped the cosmic microwave background to give us a glimpse of the very early universe. Congratulations, Betty, you have won a collection of hydrogen and helium atoms directly from the Big Bang.

BETTY: Thank you, Alan!

SOUND: Canned applause.

ALAN: We hope you enjoy! Thank you to both our contestants. We'll see you all here next time on Cosmic Quiz.

SOUND: Canned applause.

MUSIC: Closing game show music.

CREDITS: This piece is a product of the Cosmic Times Team at NASA's Goddard Space Flight Center in Greenbelt, Maryland. The performance was produced by the 2009/2010 Chesapeake High School Media Production Club, WCHS, in Pasadena, Maryland. Featured were the

voices of Andy, Marissa , Rebeka, and Carol. At the controls of the audio mixer were Ryan and Randol. We'd like to give a special thanks to Ms. Geri Cvetic, the faculty advisor for WCHS. More information about Cosmic Times and the topics in the piece can be found on our website, cosmictimes.gsfc.nasa.gov.

THE END.

Notes for Cosmic Quiz

Pronunciation notes:

- Alpher: al-fer
- Bethe: bay-tah
- Gamow: ga-maw (the "a" in "ga" is like the "a" sound in "ask")
- WMAP: w-map (pronounce w as "double-u", then the word "map")
- Wilkinson: will-kin-son
- Anisotropy: ann-eye-saw-tro-pee

Character notes:

The first paper on the origin of elements was published under the names "Alpher, Bethe, and Gamow" – the same last names as the host and contestants. This was a bit of a joke, because the first three letters of the Greek alphabet are alpha, beta, and gamma. Bethe was not actually involved in the work that was published in the paper, but Gamow added his name since the paper was coming out on April 1st. This is why our Gail Gamow character says she's a jokester.

Betty Bethe, is obviously named after Hans Bethe, and according to Wikipedia, he collected stamps quoting the very reason in the script above.

No one but a true geek would understand these references, but that's okay...and one benefit of being a geek.

Sources:

- Steady state theory:
 - http://en.wikipedia.org/wiki/Steady_State_theory
 - http://www.pbs.org/wnet/hawking/universes/html/univ_steady.html
- Big bang theory:
 - <http://map.gsfc.nasa.gov/universe/index.html>
 - <http://www.pbs.org/wnet/hawking/strange/html/bigbang.html>
- Penzias and Wilson:
 - <http://www.pbs.org/wgbh/aso/databank/entries/dp65co.html>
 - http://en.wikipedia.org/wiki/Discovery_of_cosmic_microwave_background_radiation
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- WMAP:
 - <http://map.gsfc.nasa.gov/>